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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,767	04/12/2002	Steven Paul Jolliffe	4838 WG-1	1451

7590 10/11/2005
Douglas W Swartz
1560 Broadway Suite 1200
Denver, CO 80202-5141

EXAMINER

HOTALING, JOHN M

ART UNIT PAPER NUMBER

3714

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,767

Applicant(s)

JOLLIFFE ET AL.

Examiner

John M. Hotaling II

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pirritano et al US Patent 6,620,057 in view of Quimby et al US Patent 5,910,057 and Borion US Patent 6,021,949. The rejection of the previous office action is maintained and incorporated herein. Pirritano et al (hereinafter Pir) discloses a system for locating golf balls using an RF transmitter/receiver. See figures 1 through 5 and the relative portions of the specification column 5 where it states that Referring to FIG. 1, the movable object location system of the present invention has particular application as a golf ball location system including a portable, hand held, radio frequency transmitter/receiver 10, and a golf ball of unique design 30. The transmitter/receiver includes generally, a single housing which houses, a battery pack 16, a high gain helical antenna 20, and as shown in FIG. 11, a transmitter circuit 100, and a receiver circuit 200. Referring to FIG. 2, the golf ball includes a core 31, a cover 32 and disposed between the cover and the core is a passive inductor array, generally designated 36. The array includes three passive transponders in the form of flat-loop inductors, generally designated 33. The core and the cover are composed of conventional materials well known to those skilled in the art of golf ball manufacture. Referring now to FIGS. 3, 4 and 5, each flat loop inductor 33 is

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formed as a discontinuous flat loop 40 of generally circular configuration and of rectangular cross section. The preferred material for the loop is copper foil, with a thickness c of 0.0028 inches, which is laminated to a KAPTON substrate. It is to be understood that only the presently preferred configuration for the passive transponder has been described. The transponder is not limited in configuration to a flat circular loop but may be of ellipsoidal or of non-circular configuration. Further, the loop material is not limited to copper but rather may be of gold, silver, aluminum, vapor deposited metal, or of **any other conductive material which is capable of being formed into a thin foil or film**. The substrate also is not limited to KAPTON but may be of any suitable electrical insulating material. Column 11:5-11 discloses In the preferred embodiment the array of flat-loop inductors described above is formed on the surface of a golf ball core. However, it would be equally effective to encapsulate the array within a golf ball core or to form the array on the inner or even the outer surface of the ball jacket. Other manufacturing variations are also possible as will occur to those skilled in the art. Pir lacks the specific location of an RF chip or of the specifics of the construction methods including having the RFID in a capsule surrounded by the core which is taught by Quimby. Instead Pir discloses that other manufacturing variations are also possible as will occur to those skilled in the art and in column 17 Pir discloses that the use of the system could be adapted to other uses such as tracking or locating people or movable objects. This would be adequate motivation to find other such systems which use RF for identification and location of items and to use various manufacturing techniques. In an analogous invention to Borion therein is disclosed a

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gambling chip with an identification device. Figures 5a and 6a disclose a chip and aerial connected to a diaphragm. It would be obvious to one of ordinary skill in the art using the motivation provided above to combine the references to incorporate all of the features of a chip and an aerial attached to a diaphragm with various manufacturing methods for use in a golf ball.

Response to Arguments

Applicant's arguments filed 6/23/05 have been fully considered but they are not persuasive.

With respect to applicant's arguments relative to a capsule embedded in the core since it is taught in the references that it would be equally effective to encapsulate the array within a golf ball core or to form the array on the inner or even the outer surface of the ball jacket and that other manufacturing variations are also possible as will occur to those skilled in the art. The above recitation was intended by the examiner to cover the teaching of a capsule embedded in the core to teach what is notoriously well known in the arts for insulation purposes when striking a ball. See Horchler '730, Quimby et al '057, and Helderman '815. The argument made by the applicant is akin to asking the examiner to prove that which is notoriously well known in the art. Therefore, the statement of the rejection has been modified to include the Quimby et al '057 reference to include that which was well known in the art.

With respect to the applicant's arguments that antennae are not resiliently mounted diaphragms, the antennae is or flat loop inductor is part number 33 and the loop is part number 40 which is the resilient diaphragm.

With respect to the applicant's arguments that there is no motivation to look outside of the golfball art for a related circuit please see 16:34-38 and 16:56- column 17 where it is stated that "Those skilled in the art will appreciate that the circuits disclosed in FIG. 11 represent one practical embodiment of transmitter and receiver circuits suitable for use in the RF transponder of the present invention and that variations of these circuits are possible. It will also be appreciated that the circuits may utilize individual components for each functional element or may consist of monolithic integrated circuits incorporating multiple functions.

In addition, the system may be readily adapted to other uses such as tracking or locating people or movable objects. For example, a "tag" composed of an array of transponders could be produced for the purpose of locating skiers buried in an avalanche. A ski resort could issue transponder equipped tags with lift tickets, (or skiers could wear clothing incorporating "tags") and thereby greatly increase the odds of locating skiers lost due to injury, avalanche, or blizzard (whiteout) conditions. Users of a location system embodying the present invention could acquire array equipped tags which could be attached to luggage, keyrings, or any other object the user wishes to be able to locate more easily. Also, an isotropic "tag" could be formed into the plastic grip of a gun allowing an officer to determine if a car stopped for a traffic violation contained weapon before approaching the car. "

With respect to the applicant's argument relative to the placement of the RFID and the intended use of the references used in the rejection please see above

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Terry '484 discloses a golf ball finding system, Nicholson '949 discloses the use of a high temperature RFID tag.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Hotaling II whose telephone number is (571) 272 4437. The examiner can normally be reached on Mon-Thurs 7:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272 3507. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN M. HOTALING, II
PRIMARY EXAMINER

October 6, 2005

